



MFP™ 2128

MIDI FLOOR EFFECT PROGRAMMER

OPERATING GUIDE



WARNING:
TO PREVENT ELECTRICAL SHOCK OR FIRE
HAZARD, DO NOT EXPOSE THIS INSTRUMENT
TO RAIN OR MOISTURE.
BEFORE USING THIS INSTRUMENT, READ
BACK COVER FOR FURTHER WARNINGS.

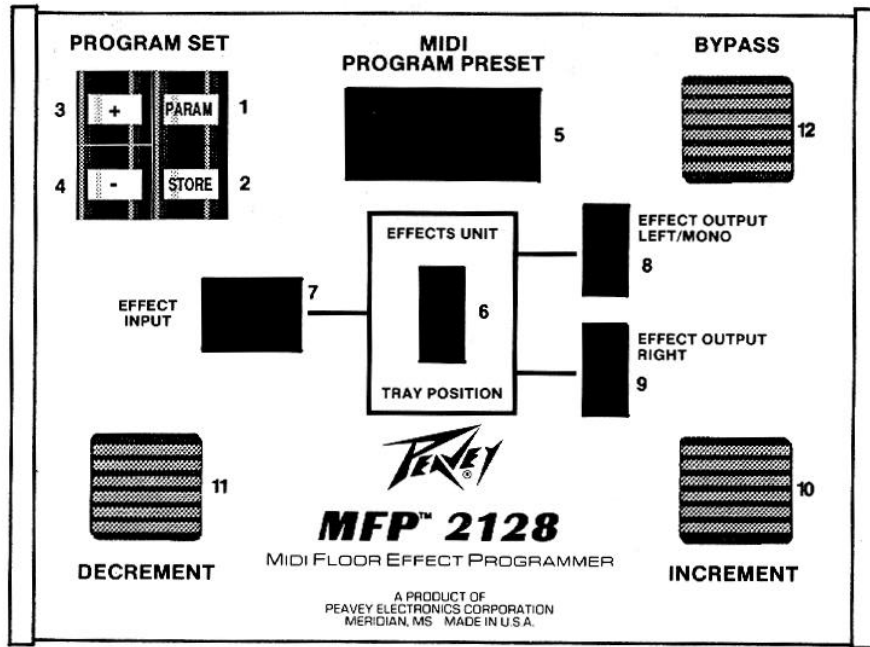
FEATURES

- Program routing assignments for up to 5 floor effects units
- Recall up to 128 presets via MIDI interface
- Foot control of program set, increment, decrement, and bypass
- On board 9 volt DC power for all 5 pedal locations
- Power supply jumper cables included for external power hook-up
- Large LED displays for ready reference
- Signal "splitting" capabilities
- Rugged flite-case packaging with strap handle and removeable lid
- Mono input/stereo output design allows use of mono and stereo devices
- Programmable switch delay time

Operating Instructions for the MFP™ 2128

INTRODUCTION

The Peavey MFP-2128 MIDI Floor Effects Programmer provides ultimate capability to control up to 5 floor effects devices via MIDI. Effects devices may be chained in any sequence making possible wide range multiple processing options without the need for manual repatching. Recall of stored programs may also be accomplished remotely by means of a Peavey or other brand MIDI Controllers.



FRONT PANEL CONTROLS:

These control switches are used to program the internal memory presets of the MFP-2128 when the unit is placed in the "Edit Mode." This is done by using the "Program Enable" switch on the patching strip.

PARAM SWITCH (1)

This switch is used to select the appropriate parameter window on the MFP-2128 so that the select window value can be altered by using the "+" or "-" switches. Depressing the Param switch will cause the MFP-2128 to sequentially select the parameters which can be modified and restored as part of the "Program Preset." The parameter which can be altered at any time is indicated by the "Flashing LED Display" window. When the unit is first placed in the "Edit Mode" the "MIDI Program Preset" display will begin to flash, indicating that the "Program Preset," can now be selected.

STORE SWITCH (2)

After each "Segment" of the preset has been set up via the "+" and "-" switches, this new "segment" can be stored into the MFP-2128 memory by depressing this "Store" switch. When the "Store" switch is depressed and held down the flashing LED window will stop flashing. As soon as the new "Segment Preset" has been stored into the MFP-2128 memory, the same window will start flashing again indicating that another "Preset Segment" can now be set up. Momentarily pressing the store switch, when the unit is in the "Edit" mode, will move the edit function back to the "MIDI Program Preset" window.

"+" SWITCH (3)

This switch can be used to increment the number displayed in the selected parameter window. The selected parameter is indicated by the flashing display window.

"-" SWITCH (4)

This switch can be used to decrement the number displayed in the selected parameter window.

MIDI PROGRAM PRESET (5)

The "MIDI Program Preset" window displays the MIDI program preset (1-128) which is executed when the "increment" or "decrement" switches are depressed or when the appropriate "Program Preset" command is received by the MFP-2128.

EFFECTS UNIT TRAY POSITION (6)

The "Effects Unit Tray Position" window displays the effect device that is being programmed (when in edit mode). All five effect devices plus the left and right main outputs can be accessed.

EFFECT INPUT (7)

The "Effect Input" window displays the input to the effects device or main output that is presently being displayed in the "effects unit tray position" window.

EFFECT OUTPUT LEFT/MONO (8)

This window displays the left (if stereo) or mono output of the device presently in the "effects unit tray position" window.

EFFECT OUTPUT RIGHT (9)

This window displays the right output of stereo effect presently in the "effects unit tray position" window. A single dash is displayed in this window for mono effects.

INCREMENT SWITCH (10)

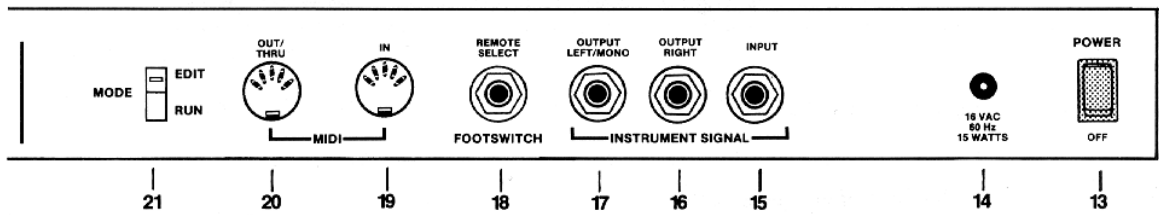
This switch is used to increment the "MIDI Program Preset Number" displayed in the "MIDI Program Preset" display window.

DECREMENT SWITCH (11)

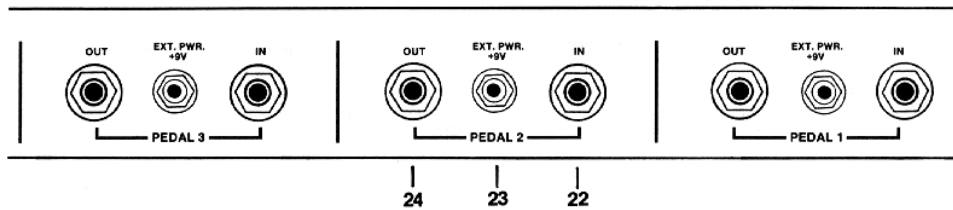
This switch is used to decrement the "MIDI Program Preset Number" displayed in the "MIDI Program Preset" display window.

BYPASS (12)

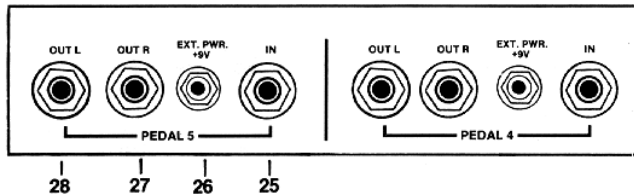
This switch is used to bypass all floor effects in the MFP-2128. Pressing this switch routes the incoming signal directly to the left and right output jacks. Pressing the switch a second time will disable the bypass function, and restore the previous effect.



PEDAL POSITIONS 1-3



PEDAL POSITIONS 4-5



PATCH STRIP CONTROLS:

POWER ON/OFF SWITCH (13)

The power on/off switch is used to enable the 9 volt dc power.

16.5 VAC POWER SUPPLY CONNECTOR (14)

This power input jack is used to provide 16.5 VAC power. A Peavey 16.5 VAC power supply is provided with the unit.

INPUT JACK (15)

This is the input jack for the MFP-2128. This input can be directly from any musical instrument or from the "Effects Send" jack of an amplifier.

OUTPUT LEFT JACK (16)

This jack is the main left (for stereo operation) or mono output for the MFP-2128. This can be connected to either the input or the "Effects Return" jack of an amplifier.

OUTPUT RIGHT /MONO JACK (17)

This jack is the main right (for stereo operation) or mono output for the MFP-2128. This can be connected to either the input or the "Effects Return" jack of an amplifier.

REMOTE SELECT FOOTSWITCH JACK (18)

Provided for the connection of an optional remote footswitch.

NOTE: If a dual momentary footswitch is used the tip is the decrement and the ring is the increment.

MIDI INPUT SOCKET (19)

A standard DIN connector which allows for a MIDI Controller interface to the processor. When such an interface is established, programs stored within the processor memory may be recalled from any remote MIDI Controller, such as the Peavey RMC-4512.

MIDI OUT/THRU SOCKET (20)

A standard DIN connector which can be programmed to send out processed MIDI information or act as a MIDI thru which will route, unaltered, all MIDI information that is received at the MIDI Input socket. When this socket is programmed to be a MIDI out, information generated by the MFP-2128 will be transmitted only on MIDI Channel 1. When programmed as a MIDI thru all MIDI data received at the MIDI in socket will be routed unaltered to the MIDI thru socket.

MODE SWITCH (21)

The "Mode" switch is used to select the "Edit" mode, thereby allowing the programming of the active presets within the unit. When the "edit" mode is selected, any or all of the 128 internal program memory locations can be programmed. During normal control/process operation, it should be in "Run" mode.

PEDAL POSITIONS 1-3 (22)**INPUT JACK**

This jack is connected to the input of the effects device.

EXTERNAL POWER +9 VOLTS

Allows external connection of a +9 VDC power supply eliminating the need for batteries.

OUTPUT JACK

This jack is connected to the output of the effects device.

PEDAL POSITIONS 4-5 (23)**INPUT JACK**

This jack is connected to the input of the effects device.

EXTERNAL POWER +9 VOLTS

Allows external connection of a +9 VDC power supply eliminating the need for batteries.

OUTPUT R JACK

This jack is connected to the right output of the effects device.

OUTPUT L JACK

This jack is connected to the left output of the effects device.

OPERATIONAL DESCRIPTION

GENERAL INFORMATION

The MFP-2128 is designed to operate with up to five floor effect devices. These devices can be either Peavey premium foot effect devices or any other brand. The MFP-2128 will accommodate up to two dual output devices. On board 9 VDC is available for all five effects.

The MIDI section of the MFP-2128 can be programmed to receive MIDI information on MIDI channels 1-8. MIDI information generated by the MFP-2128 will be transmitted on MIDI channel 1 if the MIDI out/thru socket is programmed to be an "out" socket. If this socket is programmed to be a "thru" socket then all MIDI data received at the MIDI in socket will be routed, unaltered, to the MIDI thru socket on the same MIDI channel it was received on.

POWER UP

Upon Power Up, the MFP-2128 will display the MIDI receive channel for approximately three seconds. During this period of time, the MIDI receive channel and the MIDI out/thru socket can be programmed. The receive channel can be changed to receive on MIDI channels 1-8 by depressing the "+" or "-" switches. The MIDI out/thru socket can be programmed by pressing the Param switch and using the "+" and "-" switches to switch between "Out" and "Thr" (thru). Pressing the Param switch again switches back to the MIDI receive channel. The MFP-2128 will allow the modification of these two parameters as long as the "+", "-", or Param switch is depressed. If none of these switches are pressed for approximately three seconds, the unit will automatically switch to the "Run Mode" or "Edit Mode", depending on the location of the program enable switch on the patch strip. The MIDI receive channel and the MIDI out/thru socket will be set to the last displayed number.

PROGRAMMING SWITCH DELAY TIME

When the MFP-2128 is switched from one preset to another, an associated switching transient occurs. To eliminate the transient from getting back to your amplifier we have designed into the product a "muted" delay time which removes the signal while the unit is switching. Because each performer is unique we have decided to make this delay time adjustable in an effort to suit every performer's taste. To set the switch delay time first turn the unit off. After a few seconds press the "+" and "store" switches simultaneously. While these switches are depressed turn on the unit. A "D" will be displayed in the "effects unit tray position" window which stands for the delay time. The factory preset of "060" will be displayed in the "MIDI program preset" window. Delay settings of 0 (no delay with transient) through 255 (longest delay but no transient) can be programmed into the unit using the "+" and "-" switches. In this one case the "+" and "-" switches do not automatically scroll if they are held down. After the desired setting is programmed the unit will go through its normal power up procedure.

FACTORY PRESETS

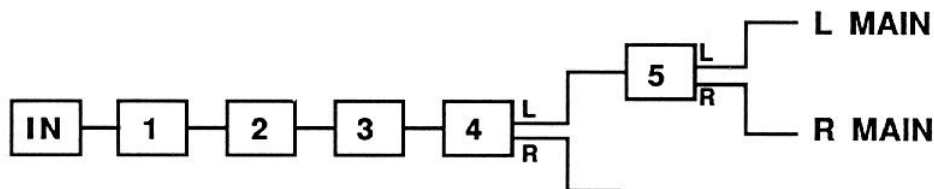
To restore the factory presets, the "+" and "-" switches should be depressed and held down when the unit is powered up. To accomplish this, turn the unit off. After a short period of time, depress the "+" and "-" switches simultaneously and, while holding these switches down turn on the power switch. The factory preset settings will be restored to the unit.

THE FACTORY PRESETS CONSIST OF THE FOLLOWING PARAMETERS:

MIDI Transmit Channel - Channel 1
MIDI Receive Channel - Channel 1
MIDI Out/thru assignment - MIDI Thru

PROGRAM PRESET TABLE

All program presets are initialized as follows:



Stated in words, the signal enters the MFP-2128 at the input jack and is routed to the input of effects unit tray position 1. The output of tray position 1 is then routed to the input of tray position 2. The output of tray position 2 is then routed to the input of tray position 3. The output of tray position 3 is then routed to the input of tray position 4. The left output of tray position 4 is then routed to the input of tray position 5. The left output of tray position 5 is routed to the left main output jack of the MFP-2128. The right output of tray position 5 is routed to the right main output jack of the MFP-2128.

MFP-2128 PROGRAMMING

To "Program" the MFP-2128, simply switch the unit into the program edit mode using the slide switch on the patch strip. When this is done, the "MIDI Program Preset" display window will begin to flash, indicating that it can now be altered. The param switch can now be used to select either the "effects unit tray position" or the "effect input" displays.

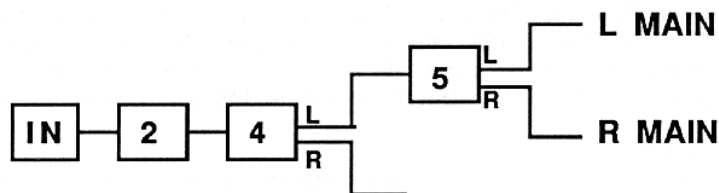
Note: These are the only two displays that can be altered within a program. The "effect output left/mono" and "effect output right" are for display

purposes only. These displays indicate which outputs were previously programmed for the currently selected units.

The selected displayed window will begin to "flash," indicating that it can now be modified. The "+" or "-" switches can now be used to modify the selected parameter value by incrementing or decrementing the number in the display window. If the "+" and "-" switches are depressed and released, the number will be incremented or decremented by one (1). If the switches are depressed and held down, the number will continue to increment or decrement until the switch is released. In this manner, the programmer can quickly scroll through the numbers to get to the desired parameter value.

Programming is very easy to accomplish, and provides the musician or performer with a multitude of effects patches. Programming can be greatly simplified if a diagram of the desired patch is sketched out first and programmed by starting at the main outputs. The following is a step-by-step example for programming the MFP-2128 using this method:

Let's say that you wish to create a patch that starts from the effects send jack of your amplifier and runs through a compressor, a stereo chorus and a dual output digital delay before returning to the effects return jack. Suppose the compressor is located in tray position 2, the chorus in tray position 4 and the delay in tray position 5 of your MFP-2128. A sketch of this patch is shown below.



1. Place the "mode" switch in the "edit" mode. The "MIDI Program Preset" number will begin to flash.
2. Select the program preset number you wish to edit by using the "+" and "-" switches.
3. Press the param switch once. The parameter value in the "effects unit tray position" display window will begin to flash, indicating that the tray position can now be used.
4. Using the "+" or "-" switches, select parameter L.
5. Press the param switch once again. The parameter value in the "effect input" display window will begin to flash, indicating that the input to the left main output can now be selected.
6. Using the "+" or "-" switches, select parameter 5L.
7. Press and hold the store switch. The display will stop flashing while the parameter is being stored in the internal memory. When the procedure is complete the display will start flashing again.
NOTE: Each segment of a patch must be stored as it is being programmed otherwise it will never be placed in the internal memory of the MFP-2128.
8. Press the param switch once again. The tray position display will once again start flashing.
9. Using the "+" or "-" switches, select parameter R.
10. Press the param switch once again. The parameter value in the "Effect Input" display window will begin to flash, indicating that the input to the right main output can now be selected.
11. Using the "+" or "-" switches, select parameter 5R.
12. Press and hold the store switch until the display begins to flash again. You have just programmed the inputs for the main outputs. You are doing fine. Let's move on.
NOTE: Steps 8-12 can be skipped if you do not wish to run the MFP-2128 in stereo.
13. Press the param switch once again. The tray position display will start to flash.
14. Using the "+" or "-" switches, select parameter 5. At this point there should be a "5" flashing in the tray position display. The "effect output left/mono" display should be showing an "L" and the "effect output right" display should be showing an "R." This simply means that the left output of tray position 5 is routed to the left main output jack and the right output of tray position 5 is routed to the right main output jack.
15. Press the param switch once again. The effect input display will begin to flash indicating that the input to tray position 5 can now be programmed.

16. Using the "+" or "-" switches, select parameter 4L.

17. Press and hold the store switch until the display starts flashing. The input to the digital delay has now been programmed. So far, so good. Keep going.

18. Press the param switch once again. The tray position display will start flashing.

19. Using the "+" or "-" switches, select parameter 4. Notice there is a 5 in the left/mono output and three dashes in the right output window. This means that the left output of tray position 4 is routed to the input of tray position 5 and the right output of tray position 4 is unassigned.

20. Press the param switch once again. The effect input display will start flashing.

21. Using the "+" or "-" switches, select parameter 2.

22. Press and hold the store switch until the display starts flashing. The input to the stereo chorus has now been programmed. We are almost done.

23. Press the param switch once again. The tray position display will start flashing.

24. Using the "+" or "-" switches, select parameter 2. Note that there is a 4 in the left/mono display and a single dash in the right display. This means that the output of tray position 2 is routed to the input of tray position 4 and that there is no right output available for tray position 2.

25. Press the param switch once again. The effect input display will begin to flash.

26. Using the "+" or "-" switches, select parameter "In".

27. Press and hold the store switch until the display starts flashing again. You have just assigned the input of the MFP-2128 to the input of the compressor. Congratulations, you have just completed programming the desired patch. There, that wasn't too bad, was it?

NOTE: At this point it would be a good idea for you to check your work.

28. With the unit still in the "Edit" mode use the param switch to get back to the tray position display.

29. Using the "+" or "-" switches, select parameter 2. Notice that the input to tray position 2 is the input of the MFP-2128 (labeled "In") and the output of tray position 2 goes to tray position 4. Now look at the diagram of the patch you sketched before you started programming. The first three segments of your sketch should look exactly like the displays on your MFP-2128. If it doesn't, you probably need to step through this example again.

30. Using the "+" or "-" switches, select parameter 4 in the tray position display. Notice that the input of tray position 4 is the output of tray position 2 and that the left output of tray position 4 goes to tray position 5. The right output of tray position 4 does not go anywhere (indicated by the three dashed lines in the display). This should look exactly like the 2nd, 3rd, and 4th segments of your patch sketch.

31. Using the "+" or "-" switches, select parameter 5 in the tray position display. Notice that the input of tray position 5 is the left output of tray position 4, the left output of tray position 5 goes to the left main output (labeled "L") and the right output of tray position 5 goes to the right main output (labeled "R"). This should look exactly like the last three segments of your patch sketch.

32. Using the "+" or "-" switches, select parameter L in the tray position display. Notice that the input of the left main output is the left output of tray position 5 and that there is nothing in the effect output displays.

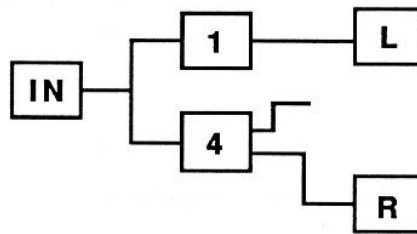
33. Using the "+" or "-" switches, select parameter R in the tray position display. Notice that the input of the right main output is the right output of tray position 5 and that there is nothing in the effect output displays.

34. If you have followed this example carefully and everything has checked properly then you are ready to start programming your own patches.

NOTE: If you wish to immediately program another patch, simply press and release the store switch. This will cause the MIDI program preset display to start flashing. You are now ready to change to a different preset.

SIGNAL SPLITTING

A unique feature of the MFP-2128 is its ability to route the signal to more than one place at the same time. Let's say you wanted to get a bigger guitar sound by running a chorused, clean sound, while at the same time running a distorted, unchorused sound to your amplifiers. This could be accomplished by splitting your input signal and sending one side to a chorus unit and sending the other side to a distortion unit. If the distortion unit was in tray position 1 and the chorus was in tray position 4 a patch sketch would look like:



It should be noted that while signals can be split, as illustrated above, signals cannot be merged back together.

PROGRAM RETENTION

The MFP-2128 contains a special rechargeable internal battery to protect and maintain stored programs while the unit is not in use. When the unit is in use (power on), an internal circuit automatically recharges the internal battery. During periods when the MFP-2128 is not in use, user-input programs will be retained in memory for approximately four weeks. Factory-input programs will be retained indefinitely.

If the MFP-2128 is turned off for a prolonged period of time (four weeks or longer), all user-input programs may be lost from memory. It is recommended, therefore, that all user-input programs be recorded in writing in case the need for reprogramming arises.

Under conditions of normal use, the internal battery should have a life expectancy in excess of five years. Battery failure is indicated if the MFP-2128 refuses to retain user-input programs during a power-on/power off cycle. Since the battery is an integral circuit component, replacement of the battery should be performed only by an authorized Peavey dealer or qualified service technician.

MFP-2128 NORMAL OPERATION

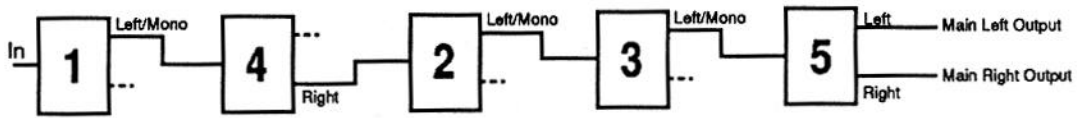
To run the MFP-2128 in its "normal" operating mode, simply switch the the unit into the run mode using the slide switch on the patch strip. When this is done the displays will no longer flash. At this point the param and store switches are disabled, however the "+" and "-" switches are still active.

NOTE: When the slide switch is set to the run mode after programming is completed the MFP-2128 will display whatever was last stored in its windows. This means that whenever that program preset is recalled from memory the MFP-2128 will display the last stored segment of that particular patch.

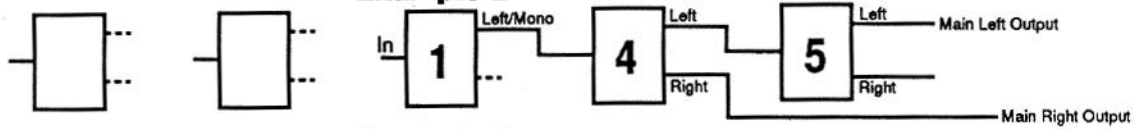
Recalling a program preset is achieved by using the increment and decrement footswitches, the "+" and "-" switches or by using an external MIDI Controller such as the Peavey RMC -4512 via the MIDI in socket on the patch strip.

Patch Worksheet

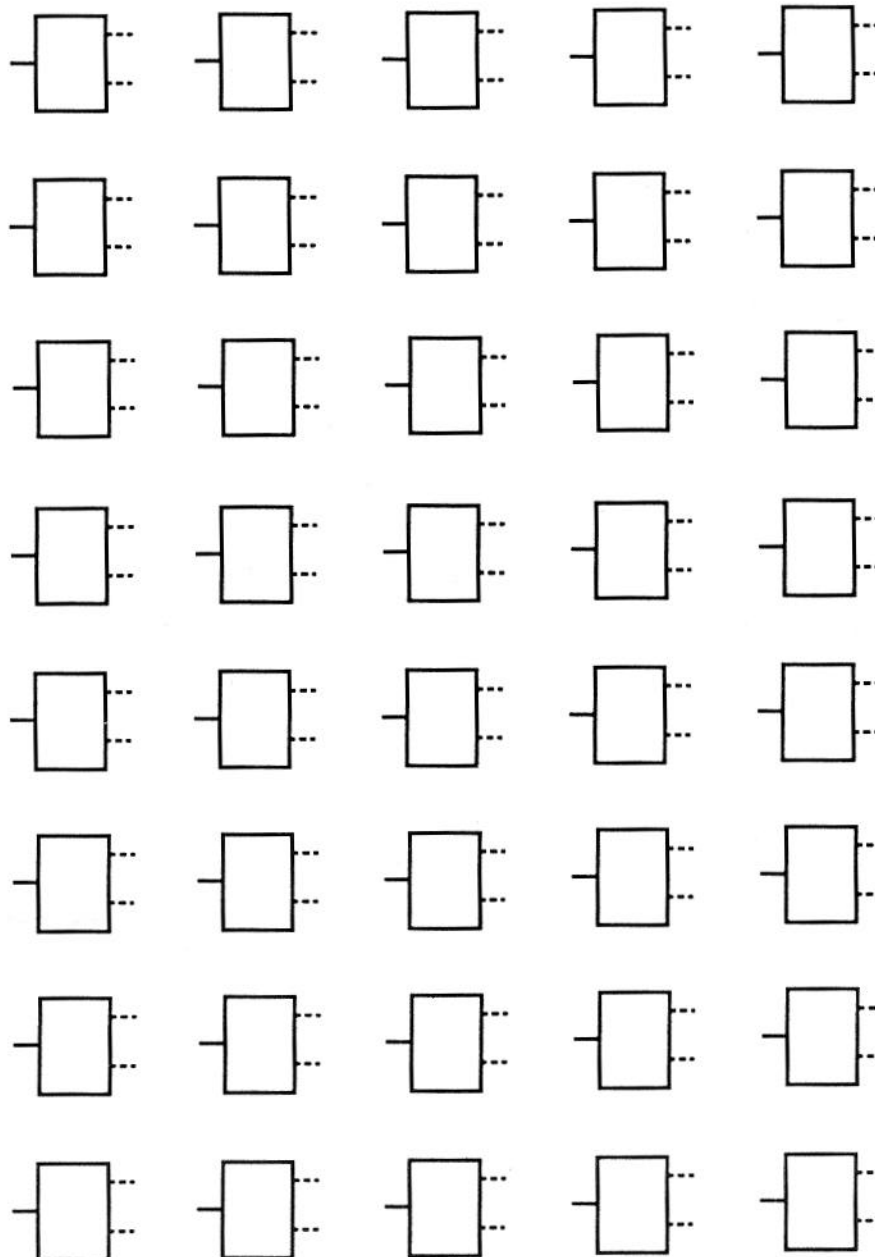
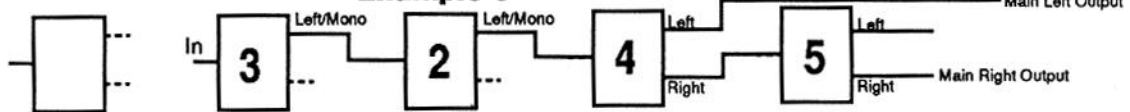
Example 1



Example 2



Example 3



SPECIFICATIONS

Weight: 151 lbs.
Size: Height - 4"
 Width - 33 1/8"
 Depth - 10 1/8"
Power Supply: Use only Peavey 16.5 VAC Power Supply
Capacity: 5 effects devices

MIDI SPECIFICATIONS:

Program Presets 1-128
 Transmits on Channel 1
 Receives on Channel 1-8
 MIDI In
 MIDI Out/Thru

DANGER

EXPOSURE TO EXTREMELY HIGH NOISE LEVELS MAY CAUSE A PERMANENT HEARING LOSS. INDIVIDUALS VARY CONSIDERABLY IN SUSCEPTIBILITY TO NOISE INDUCED HEARING LOSS. BUT NEARLY EVERYONE WILL LOSE SOME HEARING IF EXPOSED TO SUFFICIENTLY INTENSE NOISE FOR A SUFFICIENT TIME.

THE U.S. GOVERNMENT'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) HAS SPECIFIED THE FOLLOWING PERMISSIBLE NOISE LEVEL EXPOSURES:

DURATION PER DAY IN HOURS	SOUND LEVEL dBA, SLOW RESPONSE
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

ACCORDING TO OSHA, ANY EXPOSURE IN EXCESS OF THE ABOVE PERMISSIBLE LIMITS COULD RESULT IN SOME HEARING LOSS.

EAR PLUGS OR PROTECTORS IN THE EAR CANALS OR OVER THE EARS MUST BE WORN WHEN OPERATING THIS AMPLIFICATION SYSTEM IN ORDER TO PREVENT A PERMANENT HEARING LOSS IF EXPOSURE IS IN EXCESS OF THE LIMITS AS SET FORTH ABOVE. TO INSURE AGAINST POTENTIALLY DANGEROUS EXPOSURE TO HIGH SOUND PRESSURE LEVELS, IT IS RECOMMENDED THAT ALL PERSONS EXPOSED TO EQUIPMENT CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS SUCH AS THIS AMPLIFICATION SYSTEM BE PROTECTED BY HEARING PROTECTORS WHILE THIS UNIT IS IN OPERATION.

CAUTION

THIS MIXING CONSOLE/EFFECTS DEVICE/PREAMP HAS BEEN DESIGNED AND CONSTRUCTED TO PROVIDE ADEQUATE SIGNAL (VOLTAGE) FOR PLAYING MODERN MUSIC. IMPROPER USE OF THE GAIN/EQUALIZER CONTROLS AND/OR IMPROPER USE OF INTERNAL/EXTERNAL BUSES MAY CREATE CLIPPING (SQUARE WAVES) AND POSSIBLY CAUSE SUBSEQUENT DAMAGE TO THE LOUDSPEAKER SYSTEMS. EXTENDED OPERATION OF THE GAIN/EQUALIZATION CONTROLS IN THEIR MAXIMUM POSITIONS IS THEREFORE NOT RECOMMENDED. PLEASE BE AWARE THAT MAXIMUM POWER CAN BE OBTAINED WITH VERY LOW SETTINGS OF THE GAIN/EQUALIZATION CONTROLS IF THE INPUT SIGNAL IS VERY STRONG.

IT IS COMMON PRACTICE AMONG USERS OF SOUND REINFORCEMENT EQUIPMENT TO IDENTIFY THE INDIVIDUAL CHANNELS WITH A STRIP OF TAPE PLACED ABOVE OR BELOW THE ROW OF VOLUME FADERS. MANY TYPES OR BRANDS OF TAPE HAVE A VERY STRONG ADHESIVE WHICH CAN INHIBIT THE PAINT ON THE FACEPLATE AND ACTUALLY REMOVE THE PAINT WHEN THE TAPE IS REMOVED. WE STRONGLY RECOMMEND THAT SCOTCH TAPE NOT BE USED ON PAINTED SURFACES NOR ANY OTHER TAPE THAT IS NOT ESPECIALLY DESIGNED FOR SUCH APPLICATIONS. MEDIUM OR LIGHT ADHESIVE MASKING OR LABEL TAPE IS RECOMMENDED IF TAPE IS USED. ANY TAPE LEFT ON PAINTED SURFACE FOR EXTENDED PERIODS WILL BE DIFFICULT TO REMOVE. NEVER USE CLEAR OR SCOTCH TAPE FOR THESE APPLICATIONS.

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water, i.e. a bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator or another heat producing amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord. For more information on grounding write for our free booklet "Shock Hazard and Grounding."
10. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag, or an ammonia based household cleaner if necessary.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.
15. This unit should be checked by a qualified service technician if:
 - A. The power supply cord or plug has been damaged.
 - B. Anything has fallen or been spilled into the unit.
 - C. The unit does not operate correctly.
 - D. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.



Due to our efforts for constant improvement, features and specifications listed herein are subject to change without notice.